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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/656,918

09/05/2003

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TAV-2044

8375

7590

06/29/2011

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EXAMINER

ROE, JESSEE RANDALL

ART UNIT

PAPER NUMBER

1733

MAIL DATE

DELIVERY MODE

06/29/2011

PAPER

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* ROBIN M. FORBES JONES, HENRY E. LIPPARD,  
TIMOTHY A. STEPHENSON, ROBERT J. MYERS,  
and DAVID J. BRADLEY

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Appeal 2010-006845  
Application 10/656,918  
Technology Center 1700

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Before CATHERINE Q. TIMM, BEVERLY A. FRANKLIN, and  
MICHAEL P. COLAIANNI, *Administrative Patent Judges*.

FRANKLIN, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134 from the Examiner's rejection of claims 1, 2, 4-8, 10, 12-20, 32-34, 53, and 54. We have jurisdiction under 35 U.S.C. § 6. An oral hearing was held on May 10, 2011.

## STATEMENT OF THE CASE

Claim 1 is representative of the subject matter on appeal and is set forth below:

1. An alloy having favorable fatigue resistance and comprising:
    - at least 20 weight percent cobalt;
    - 32.7 to 37.3 weight percent nickel;
    - 18.75 to 21.25 weight percent chromium;
    - 8.85 to 10.65 weight percent molybdenum;
    - less than 30 ppm nitrogen;
    - less than 0.7 weight percent titanium;
    - at least one of at least 0.05 to 0.15 weight percent aluminum, at least 5 to 20 ppm calcium, at least 5 to 50 ppm magnesium, and at least 5 to 50 ppm cerium; and
    - no greater than 1.05 weight percent iron;
    - no greater than 0.035 weight percent carbon; and
- wherein the alloy includes generally spherical oxide inclusions and is substantially free of titanium nitride and mixed metal carbonitride inclusion.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Smith	3,356,542	Dec. 5, 1967
Ototani	4,820,485	Apr. 11, 1989
Thompson	6,342,068 B1	Jan. 29, 2002

### THE REJECTIONS

1. Claims 1, 2, 4-8, 10, 12, 16-20, 32-34, 53, and 54 are rejected under 35 U.S.C. § 103(a) as being obvious over Smith.
2. Claims 13-15 under § 103(a) as being obvious over Smith as applied to claim 1, and further in view of Ototani.
3. Claims 20, 32-34, and 54 are rejected under § 103(a) as being obvious over Smith as applied to claim 1, and further in view of Thompson.

### ISSUES

Did the Examiner err in determining that the following teaching of Smith found at column 4, ll. 68-72, suggests “less than 30 ppm nitrogen” as recited in Appellants’ claim 1:

It is critically important that the alloy composition contain no more than 0.05% of carbon, boron, oxygen, nitrogen or beryllium, the total of these components being no more than 0.1%?

We answer this question in the affirmative and reverse.

### ANALYSIS

(with Findings of Fact and Principles of Law)

It is the Examiner’s position that the above-quoted teaching of Smith is a teaching of a range of from 0 to 500 ppm. Ans. 14.

On the other hand, Appellants’ position is that Smith’s disclosure describes merely an upper limit for nitrogen in the alloy of 500 ppm, and

does not teach a range of from 0 to 500 ppm. Br. 17. This position is supported by the Lippard Declaration, attached as Exhibit 1 of the Brief. Therein, in paragraph 13 of this Declaration, Mr. Lippard attests that the alloy of Smith would have included at least 50 ppm nitrogen because this is the minimum level of nitrogen found in a conventional MP35N alloy. Br. 20. During oral hearing, Appellants reiterated this position. Oral Hearing Transcript, pp. 4-7 (May 10, 2011).

In view of the above, we determine that the preponderance of evidence weighs in favor of Appellants' position. In arriving at this determination, we note that in the paragraph bridging pages 17-18 of the Answer, the Examiner admits that Smith does not demonstrate the benefit to limiting the nitrogen level to less than 30 ppm; yet requires of Appellants to provide evidence of unexpected results. This is improper. The Examiner has the initial burden of presenting a *prima facie* case of unpatentability before the burden shifts to Appellants, who must then produce argument, with or without evidence, rebutting the initial case of unpatentability. *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

Hence, for the reason discussed above, we agree with Appellants' arguments that the Examiner has not presented a *prima facie* case of obviousness. We, therefore, reverse each of the rejections (in the other rejections, the Examiner's reliance on the other references does not cure the deficiency of Smith).

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Application 10/656,918

CONCLUSIONS OF LAW AND DECISION

Each rejection is reversed.

REVERSED

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